# Virtualization Technologies on Linux

Course code: LXVIRT

This course is designated for administrators of LINUX servers who need to use and administrate the virtualization systems like XEN, Qemu, OpenVZ and KVM. Participants will learn to install and configure these virtualization systems for various purposes.

#### Who is the course for

This course is designated for administrators of LINUX servers who need to use and administrate the virtualization systems like XEN, Qemu, OpenVZ, VMWare, etc.

#### What we teach you

Participants will learn basic principles and possibilities of virtualization technologies in the LINUX systems. The course is focused on Qemu, KVM, OpenVZ and XEN sytems.

### Required skills

Wider knowledge of LINUX

#### Course Outline

Motivation

- Load balancing technologies
- Cost reduction
- Renovation of the hardware infrastructure
- Fast reaction to the users demand
- Server consolidation

The virtualization principles and character of the virtualization technologies

- Paravirtualization
- Native virtualization
- Emulation

#### The basic terms

- Dom0
- DomU
- Hypervisor
- Virtual machine monitor

#### Requirements for hardware

- Requirements for virtualization hardware
- Benefits of the HVM
- Vanderpool and Pacifica architectures
- Storage area network

## Virtualization environment

- Instalation and configuration
- Information resources
- XEN, KVM, OpenVZ and Qemu systems
- Preparing of the virtual hosts

# Practical applications

- Cache domain (DNS and proxy server)
- Mail domain (SMTP and IMAP server)
- Directory services domain (LDAP server)
- Web domain (Apache + PHP, MySQL)

## GOPAS Praha

Kodaňská 1441/46 101 00 Praha 10 Tel.: +420 234 064 900-3 info@gopas.cz

#### GOPAS Brno

Nové sady 996/25 602 00 Brno Tel.: +420 542 422 111 info@gopas.cz

## GOPAS Bratislava

Dr. Vladimíra Clementisa 10 Bratislava, 821 02 Tel.: +421 248 282 701-2 info@gopas.sk



Copyright © 2020 GOPAS, a.s., All rights reserved